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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/555,725	11/07/2005	Arthur Day	112701-678	9932
29157	7590	10/19/2009		
K&L Gates LLP P.O. Box 1135 CHICAGO, IL 60690			EXAMINER DEGUIRE, KATHERINE E	
			ART UNIT 1794	PAPER NUMBER
			NOTIFICATION DATE 10/19/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

chicago.patents@klgates.com

Office Action Summary

Application No.

10/555,725

Applicant(s)

DAY ET AL.

Examiner

KATHERINE DEGUIRE

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/88)
Paper No(s)/Mail Date 2006/11/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of group I, claims 1-14 in the reply filed on 06/15/09 is acknowledged.

Claim Rejections - 35 USC § 112

Claim 4 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 is unclear because it does not define the configuration of the fat based confectionary that corresponds with the claimed volume. Claim 4 depends from claim 1 which includes the limitation of "at least one strand having a continuous strand of a plurality of curls which is randomly coiled on a receiving end" However, claim 4 does not specify if the claimed volume corresponds to the extruded unshaped fat confectionary product or to the coiled product.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 1-14 rejected under 35 U.S.C. 103(a) as being unpatentable over Crook.

Regarding claim 1, 2, 9, and 10, Crook discloses a fat based confectionary product that is extruded under pressure in order to form a strand. The confectionary product is in a substantially solid or semi solid non pourable form that is capable of retaining its shape and which has a temporary flexibility or plasticity enabling it to be physically manipulated (column 2, line 7-24). The extruder that produces the confectionary may have a wide variety of die shapes including spirals, twists and springs (column 3, line 57-66) A spring inherently has a plurality of curls that are randomly coiled on a receiving surface. However, it would have been obvious to one of ordinary skill in the art to include a variety of shapes for aesthetic design choices. Since Crook discloses that the confectionary is capable of retaining its shape after extrusion, any design choice is possible.

Crook does not disclose at least one strand that has a continuous length of higher than 80mm, 100mm, or 500mm. However, Crook discloses that the confectionary retains its shape after extrusion regardless of the shape. If the confectionary retains its

shape after the extrusion, strands of varying sizes would be structurally sound and plausible for different product design choices.

It would have been obvious to one of ordinary skill in the art to include a variety of shapes and sizes for the extrudate. According to MPEP 2144.04[R-6], the length of the strand is considered an aesthetic design choice and therefore not patentably distinct. The length of the strand is related to ornamentation and does not have a mechanical function. In *re Seid*, 161 F.2d 229, 73 USPQ 431 (CCPA 1947) (Claim was directed to an advertising display device comprising a bottle and a hollow member in the shape of a human figure from the waist up which was adapted to fit over and cover the neck of the bottle, wherein the hollow member and the bottle together give the impression of a human body. Appellant argued that certain limitations in the upper part of the body, including the arrangement of the arms, were not taught by the prior art. The court found that matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art.).

Crook does not disclose a surface area to mass ratio of greater than 8.0cm^2 or 10cm^2 to one gram. However, Crook does disclose a fat based confectionary product having the same properties in claim 1 such as flexibility, ability to be physically manipulated, and ability to retain shape. Crook also teaches that the confectionary product is made in the same way as in the instant application. Crook discloses that the confectionary mass is mixed in a barrel screw extruder and extruded through a die

under pressure and at a low temperature of 0 to 28C (column 3, line 18-27 and column 5, line 16-19).

In comparison, it is noted that the instant application discloses the method of making (p. 10, line 20-27) comprising:

Providing a solid fat based confectionary

Submitting the solid fat based confectionary mass to a pressure in an extruder (barrel) at a temperature of less than 30C

Passing the solid fat based confectionary mass through a die of predetermined cross section to make at least one strand of product.

The instant application does not appear to disclose a different method from that would render the claimed surface area to mass ratio as unexpected or unique from the prior art. The office does not possess lab facilities to test all properties of a product so one of ordinary skill in the art must look to other similarities between the claimed invention and prior art. It would have been obvious to one of ordinary skill in the art that the fat based confectionary of Crook would have the claimed surface area to mass ratio due to other identical properties and method of making. The confectionary product would be expected to possess the claimed property, absent any clear and convincing evidence and/or arguments to the contrary.

Regarding claim 3, Crook discloses extruding a solid mass of confectionary under pressure though material through a die in order to form the extrudate. The extruding temperature is disclosed at 0 to 28C (column 5, line 16-19)

Regarding claim 4, Crook does not disclose a volume occupancy of more than $2.5\text{cm}^3/\text{g}$ for the coiled fat based confectionary product. However, Crook does teach that the fat based product can assume any number of shapes due to its flexible nature. It would have been obvious for the product to assume a number of shapes and volumes. Particularly, one of ordinary skill in the art would expect a spiral shape to have a high volume due to the hollow center and space between the coils. A high volume such as the claimed amount would take up more with a smaller amount of mass. This would ensure that a small amount of confectionary would be used which would save money and materials.

Regarding claim 5, Crook discloses a temporary flexibility of about an hour after extrusion (example I).

Regarding claim 6, Crook discloses a fat based confectionary in the form of dark, milk, or white chocolate (column 5, line 21-22).

Regarding claim 7, Crook does not specifically disclose a milk fat percentage of 3 to 8% and a total fat content of 26 to 40% by weight. However, FDA standards dictate that a finished milk chocolate contains a milk fat percentage of not less than 3.39% and a chocolate liquor percentage of not less than 10%. Chocolate liquor contains a fat percentage of 50 to 60%. Calculating the percent of fat from the chocolate liquor and from the milkfat gives a total fat percentage of 8.39%-61.39% (FDA Standards of identity for chocolate, p.3 and p. 8)

Fat content if 10% cocoa liquor

Fat from the chocolate liquor: 50-60% fat in cocoa liquor so use 50% for lower range

$50\% \text{ fat in cocoa liquor} \times 10\% \text{ cocoa liquor in milk chocolate} = 5\% \text{ fat from cocoa liquor in milk chocolate}$

$3.39\% \text{ milk fat} + 5\% \text{ fat from cocoa liquor} = 8.39\% \text{ fat in milk chocolate}$

Fat content if maximum percentage cocoa liquor

Assume a cocoa liquor percentage of the highest possible amount with a minimum milk fat percentage e.g. $100\% - 3.39\% \text{ milk fat} = 96.61\% \text{ cocoa liquor in milk chocolate}$

Fat from the chocolate liquor: 50-60% fat in cocoa liquor so use 60% for higher range

$60\% \text{ fat in cocoa liquor} \times 96.61\% \text{ cocoa liquor in milk chocolate} = 58\% \text{ fat from cocoa liquor in milk chocolate}$

$3.39\% \text{ milk fat} + 58\% \text{ fat from cocoa liquor} = 61.39\% \text{ fat in milk chocolate}$

The amount of fat can be modified by varying the milk fat percentage and adding other sources of fat. However, chocolate liquor and milk fat are the only required ingredients for milk chocolate. One of ordinary skill in the art would expect the total fat and milk fat percentages to be in the claimed range in order to comply with FDA standards for a product retailed in the US. Even if the product is not sold in the US, these standards are widely accepted in the art due to these regulations.

Regarding claim 8, Crook discloses a cross sectional shape of rods, spirals, twists, springs, letters of the alphabet, and thin films (column 3, line 58-65). One of ordinary skill in the art would expect letters of the alphabet to have at least one of the claimed shapes such as a circle or a triangle.

Regarding claim 11, Crook teaches that two or more fat-based confectionary materials may be extruded through multi-orifice die (column 5, line 35-45). Crook also discloses that the shape of the die and hence the confectionary may be a spiral or spring (column 3, line 58-65). It would have been obvious to extrude several strands of confectionary through parallel extrusion to obtain a product of intermeshed and curled configuration of strands. The claimed configuration is a matter of aesthetic design choice and therefore not patentably distinct.

Regarding claim 12-14, Crook teaches the fat confectionary product of claim 1 as disclosed in the above analysis. Crook also teaches co-extruding the fat base confectionary with ice cream, sorbet, yoghurt, mousse, praline, marshmallow, nougat (column 5, line 35-45). It would have been obvious for the disclosed food items to serve as a support for receiving the fat based confectionary product. For example, the fat based confectionary chocolate is commonly added on top of ice cream, sorbet, etc.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KATHERINE DEGUIRE whose telephone number is

(571)270-1136. The examiner can normally be reached on Monday through Friday 9-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Katherine E. DeGuire/
Examiner, Art Unit 1794

/Keith D. Hendricks/
Supervisory Patent Examiner, Art Unit 1794